

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claim 1 (Previously presented) A blue colored, infrared and ultraviolet radiation absorbing glass composition having a composition comprising a base glass portion comprising:

SiO ₂	66 to 75 percent by weight,
Na ₂ O	10 to 20 percent by weight,
CaO	5 to 15 percent by weight,
MgO	0 to 5 percent by weight,
Al ₂ O ₃	0 to 5 percent by weight, and
K ₂ O	0 to 5 percent by weight,

and a primary solar radiation absorbing and colorant portion consisting essentially of:

total iron	0.6 to 2 percent by weight,
FeO	0.15 to 0.65 percent by weight,
CoO	30 to 250 PPM,
Se	1 to 15 PPM,
TiO ₂	0 to 0.9 percent by weight, and
Nd ₂ O ₃	0 to 3 percent by weight,

the glass having a redox in the range of 0.15 to 0.58, wherein at a redox range from 0.15 to 0.4, the range of CoO is from 60 to 250 PPM, and wherein at a redox range greater than 0.4, the CoO is in the range of 30 to 100 PPM, and wherein at a thickness of 0.160 inches, the glass has a luminous transmittance (LTA) of 35% up to 70%, and a color characterized by a dominant wavelength in the range of 479 to 495 nanometers and an excitation purity of at least 4%.

Claim 2 (Original) The composition as in claim 1 wherein the total iron concentration is from greater than 0.9 to 1.3 weight percent.

Claim 3 (Previously presented) The composition as in claim 2 wherein the total iron concentration is up to 1.1 weight percent.

Claim 4 (Original) The composition as in claim 1 wherein, the FeO concentration is 0.20 to 0.50 weight percent.

Claim 5 (Original) The composition as in claim 1 wherein the CoO concentration is 60 to 130 PPM.

Claim 6 (Original) The composition as in claim 4 wherein the CoO concentration is 60 to 95 PPM.

Claim 7 (Original) The composition as in claim 1 wherein, the Selenium concentration is up to 12 PPM.

Claim 8 (Original) The composition as in claim 1 wherein, the TiO₂ concentration is 0 to 0.5 weight percent.

Claim 9 (Original) The composition as in claim 1 wherein the LTA is in the range of 45 to 55 percent.

Claim 10 (Original) The composition as in claim 1 wherein the composition has a redox of 0.35 to 0.55.

Claim 11 (Original) The composition as in claim 1 wherein the composition has a redox of 0.20 to 0.35.

Claim 12 (Original) The composition as in claim 1 wherein the dominant wavelength of the glass is in the range of 480 to 492 nanometers.

Claim 13 (Original) The composition as in claim 12 wherein the dominant wavelength of the glass is up to 489 nanometers.

Claim 14 (Original) The composition as in claim 1 wherein the total iron concentration is from 0.9 to 1.3 weight percent, the FeO concentration is 0.20 to 0.35 weight percent, and the CoO concentration is 60 to 90 PPM.

Claim 15 (Original) The composition as in claim 1 wherein the TiO₂ concentration is 0.02 to 0.40 weight percent.

Claim 16 (Original) The composition as in claim 1 wherein the glass has a total solar ultraviolet transmittance (TSUV) of 55 percent or less, a total solar infrared transmittance (TSIR) of 35 percent or less and a total solar energy (TSET) transmittance of 55 percent or less.

Claim 17 (Previously presented) The composition as in claim 1 wherein at a thickness of 0.160 inches, the glass has a color characterized by a dominant wavelength in the range of 481 to 489 nanometers and an excitation purity of 8 to 30 percent.

Claim 18 (Previously presented) The composition as in claim 16 wherein at a thickness of 0.160 inches, the glass has a total solar ultraviolet transmittance (TSUV) of 40 percent or less, a total solar infrared transmittance (TSIR) of 25 percent or less and a total solar energy (TSET) transmittance of 40 percent or less, and the color of the glass is characterized by a dominant wavelength in the range of 482 to 487 nanometers and an excitation purity of 8 to 30 percent.

Claim 19 (Previously presented) The composition as in claim 1 wherein at a thickness of 0.154 inches the glass has a total solar ultraviolet transmittance (TSUV) in the range of 20 to 40 percent, a total solar infrared transmittance (TSIR) in the range of 10 to 35 and a total solar energy transmittance (TSET) in the range of 25 to 45 percent or less.

Claim 20 (Original) The composition as in claim 1 wherein, the Selenium concentration is up to 6 PPM.

Claim 21 (Previously presented) A flat glass sheet having the glass composition recited in claim 1 formed by a float process.

Claim 22 (Original) An automotive window formed from the flat glass sheet of claim 17.

Claim 23 (Previously presented) A blue colored, infrared and ultraviolet radiation absorbing glass composition having a composition comprising a base glass portion comprising:

SiO ₂	66 to 75 percent by weight,
Na ₂ O	10 to 20 percent by weight,
CaO	5 to 15 percent by weight,
MgO	0 to 5 percent by weight,
Al ₂ O ₃	0 to 5 percent by weight, and
K ₂ O	0 to 5 percent by weight,

and a primary solar radiation absorbing and colorant portion consisting essentially of:

total iron	0.6 to 2 percent by weight,
FeO	0.15 to 0.65 percent by weight,
CoO	30 to 250 PPM,
Se	1 to 15 PPM,
TiO ₂	0 to 0.9 percent by weight, and
Nd ₂ O ₃	0 to 3 percent by weight,

the glass having a redox in the range of 0.15 to 0.55, wherein at a redox range from 0.15 to 0.4, the range of CoO is from 60 to 250 PPM, and wherein at a redox range greater than 0.4, the CoO is in the range of 30 to 100 PPM and wherein at a thickness of 0.154 inches the glass has: a luminous transmittance (LTA) of 35% up to 60%,

a total solar ultraviolet transmittance (TSUV) of 55 percent or less,

a total solar infrared transmittance (TSIR) of 35 percent or less,
a total solar energy (TSET) transmittance of 55 percent or less, and
a color characterized by a dominant wavelength in the range of 479 to
495 nanometers and an excitation purity of at least 4%.

Claim 24 (Original) The composition as in claim 23 wherein the total iron concentration is from 0.9 to 1.3 weight percent, the FeO concentration is 0.20 to 0.50 weight percent, the CoO concentration is 60 to 100 PPM, the Selenium concentration is up to 12 PPM, and the dominant wavelength of the glass is in the range of 479 to 491 nanometers, and the LTA is in the range of 40 to 55 percent.

Claim 25 (Original) The composition as in claim 23 wherein the CoO concentration is 60 to 95 PPM.

Claim 26 (Original) The composition as in claim 23 wherein the selenium concentration is up to 6 PPM.

Claim 27 (Original) The composition as in claim 23 wherein, and the TiO₂ concentration is 0 to 0.5 weight percent.

Claim 28 (Original) The composition as in claim 23 wherein the composition has a redox of 0.15 to 0.35.

Claim 29 (Original) The composition as in claim 23 wherein the glass has a total solar ultraviolet transmittance (TSUV) of 40 percent or less, a total solar infrared transmittance (TSIR) of 25 percent or less and a total solar energy (TSET) transmittance of 45 percent or less.

Claim 30 (Original) The composition as in claim 29 wherein the glass has a color characterized by a dominant wavelength in the range of 482 to 487 nanometers and an excitation purity of 8 to 20 percent.

Claim 31 (Previously presented) The composition as in claim 23 wherein at a thickness of 0.154 inches the glass has a total solar ultraviolet transmittance (TSUV) in the range of 20 to 40 percent, a total solar infrared transmittance (TSIR) in the range of 10 to 35 and a total solar energy transmittance (TSET) in the range of 25 to 45 percent or less.

Claim 32 (Previously presented) A flat glass sheet having the glass composition recited in claim 23 formed by a float process.

Claim 33 (Original) An automotive window formed from the flat glass sheet of claim 23.

Claim 34 (Previously presented) An automotive transparent glazing panel comprising:

at least one transparent panel selected from side and back transparent panels that is a blue colored, infrared and ultraviolet radiation absorbing glass composition having a composition comprising a base glass portion, comprising:

SiO ₂	66 to 75 percent by weight,
Na ₂ O	10 to 20 percent by weight,
CaO	5 to 15 percent by weight,
MgO	0 to 5 percent by weight,
Al ₂ O ₃	0 to 5 percent by weight, and
K ₂ O	0 to 5 percent by weight,

and a primary solar radiation absorbing and colorant portion consisting essentially of:

total iron	0.6 to 2 percent by weight,
FeO	0.15 to 0.65 percent by weight,
CoO	30 to 250 PPM,
Se	1 to 15 PPM,
Nd ₂ O ₃	0 to 3 percent by weight, and

TiO₂ 0 to 0.9 percent by weight,
the glass having a redox in the range of 0.15 to 0.58, wherein at a redox range from 0.15 to 0.4, the range of CoO is from 60 to 250 PPM, and wherein at a redox range greater than 0.4, the CoO is in the range of 30 to 100 PPM and wherein the glass has a luminous transmittance (LTA) of 35% up to 60%, and a color characterized by a dominant wavelength in the range of 479 to 495 nanometers and an excitation purity of at least 4% at a thickness of 0.160 inches wherein the glazing panel has a thickness in the range of 1.5 to 10 millimeters.

Claim 35 (Presently presented) Transparent glass glazing panel set for mounting on an automobile vehicle, comprising:

- a windshield,
- front side windows,
- rear side windows, and
- a rear window,

wherein at least one of the front side windows, rear side windows; or rear window has the glazing panel of Claim 34.

Claim 36 (Withdrawn) Transparent glass glazing panel set for mounting on an automobile vehicle, comprising:

- a windshield,
- front side windows,
- rear side windows ;and
- a rear window,

wherein at least one of the front side windows, rear side windows; or rear window has the glass glazing panel with a glass composition that is blue-colored and infrared and ultraviolet radiation absorbing glass having a luminous transmission under illuminant A of 45 to 55 percent.

Claim 37 (Withdrawn) Transparent glass glazing panel set for mounting on an automobile vehicle, comprising:

- i) a windshield,
- ii) front side windows,
- iii) rear side windows ;and
- iv) a rear window,

wherein the panels of ii) iii) and iv) all are blue-colored and infrared and ultraviolet radiation absorbing glass wherein at least one of the set of panels of ii) and iii) have a luminous transmission under illuminant A of 45 to 55 percent, and at least one of the set of panels of iii) and iv) have a luminous transmission under illuminant A in the range of 20 to 45 percent.

Claim 38 (Withdrawn) Transparent glass glazing panel set of claim 37 wherein the windshield is a blue colored infrared and ultraviolet radiation absorbing glass with a luminous transmission of greater than 65 percent.

Claim 39 (Withdrawn) Transparent glass glazing panel set of claim 36, wherein the panel set with the luminous transmission under A illuminant of 20 to 45 percent has a blue colored, privacy, infrared and ultraviolet radiation absorbing glass composition comprising a base glass portion comprising:

SiO ₂	66 to 75 percent by weight,
Na ₂ O	10 to 20 percent by weight,
CaO	5 to 15 percent by weight,
MgO	0 to 5 percent by weight,
Al ₂ O ₃	0 to 5 percent by weight,
K ₂ O	0 to 5 percent by weight,

and a primary solar radiation absorbing and colorant portion comprising:

total iron	0.9 to 2 percent by weight,
FeO	0.15 to 0.65 percent by weight,
CoO	90 to 250 PPM, and
TiO ₂	0 to 0.9 percent by weight,

the glass having a luminous transmittance (LTA) of greater than 20% up to 45%, and a color characterized by a dominant wavelength in the range of 479 to 491 nanometers and an excitation purity of at least 4% at a thickness of 0.160 inches.

Claims 40-43 (Canceled)

Claim 44 (Previously presented) The composition according to claim 1 wherein Se is in an amount of greater than 6 PPM.